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ABSTRACT

This study monitored classroom quality throughout three Head Start programs in the Southeastern United States, using the "Assessment Profile for Early Childhood Programs: Research Edition II." A random sample of classrooms was selected to represent high and low quality classrooms in urban and rural settings. Parents and teachers rated the social behaviors of 328 children who were nested within 40 classrooms. Findings indicated that mothers with higher self-reported depression levels also indicated that their children displayed fewer positive social behaviors and more problem behaviors than did mothers with lower levels of depression. Parent-reported home violence was associated with more teacher-identified child disruptive behavior. Higher quality classrooms tended to have lower class averages for the parent-reported child problem behaviors. Teachers who were observed to interact less positively with children tended to rate the children in their classrooms as more compliant. The teacher's ability to individualize instruction tended to moderate the association between the child's age and prosocial behaviors while also moderating the association between maternal depression and parents' reports of their children's problem behaviors. (Contains 54 references.) (Author/KB)

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The Relationship Between Indicators of the Quality of a Head Start Classroom Environment and Ratings of Child Social Behavior

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Abstract

Classroom quality throughout three Head Start programs in the southeastern United States was monitored using the Assessment Profile for Early Childhood Programs: Research Edition II (Abbott-Shim & Sibley, 1998). A random sample of classrooms was selected to represent high and low quality classrooms in urban and rural settings. Parents and teachers rated the social behaviors of 328 children who were nested within 40 classrooms. Mothers with higher self-reported depression levels also indicated that their children displayed fewer positive social behaviors and more problem behaviors than did mothers with lower levels of depression. Parent-reported home violence was associated with more teacher-identified child disruptive behavior. Higher quality classrooms tended to have lower class averages for the parent-reported child problem behaviors. Teachers who were observed to interact less positively with children tended to rate the children in their classrooms as more compliant. The teacher's ability to individualize instruction tended to moderate the association between the child's age and prosocial behaviors while also moderating the association between maternal depression and parents' reports of their children's problem behaviors.

The Relationship Between Indicators of the Quality of a Head Start Classroom Environment and Ratings of Child Social Behavior

The acquisition of positive social behaviors, including patterns of interaction and friendship formation, is thought to begin and become relatively fixed at an early age. Failure to negotiate successfully through this important developmental task has been associated with problems of social adjustment and self-image at later ages (Hartup & Moore, 1990; Miller, 1993; Fields, 1999). Since the pre-school or child care setting is the major out-of-home socialization experience for many young children, the nature of the opportunities for social development presented to children in these settings can be very important to their development. The relationship between child care quality and children's social development has been studied extensively over the last few decades (Bryant, Peisner-Feinberg, & Clifford, 1993; Howes & Olenick, 1986; Howes & Hamilton, 1993; McCartney, 1984; Phillips & Howes, 1987; Phillips, McCartney, & Scarr, 1987; Ruopp, Travers, Glantz, & Coelen, 1979; Vandell & Powers, 1983; Whitebook, Howes, Phillips, & Pemberton, 1989). In general, children who experience high-quality child care demonstrate more positive social outcomes than children who experience low-quality child care.

Much of the child care literature employs global ratings of the quality of the care setting such as the Early Childhood Environment Rating Scale (ECERS) (Harms & Clifford, 1980). A rich body of literature has shown that overall quality ratings of child care settings such as those obtained through use of the ECERS and measures like it are associated with the level of social functioning in children. Children ages three to five who spent an average of 25 hours per week

in child care settings which were higher in overall quality were found to display more smiling and laughing, to show a greater intensity of positive affect, and to display less intense negative affect than children in lower quality settings. The temperament of the child did not moderate the relationship between the quality of the child care environment and children's display of affect.

Children's affect was also associated with the quality of the caregiving behaviors exhibited by the teachers (Hestenes, Kontos, & Bryan, 1993). In a study of 140 Swedish children from two-parent families, the type of care that the children received (home, center, or family setting) did not show a relationship to the social skills of the children. However, the quality of the care was associated with their social functioning (Lamb, Hwang, Broberg, & Bookstein, 1988). In a study of predominantly middle-class four-year-old children in Swedish child care settings, higher overall quality was associated with fewer internalizing and social withdrawal problems and more positive social behaviors. In addition, four-year-old boys who attended high quality care were described as having lower levels of fearfulness and unhappiness and better social skills, as compared to boys in lower quality care (Hagekull & Bohlin, 1995).

In addition to the literature that focuses on global measures of quality, it is also important to recognize that classroom quality is a multidimensional construct that is both influenced by and interacts with characteristics of the program, community, and family. Love, Meckstroth, and Sprachman (1997) outlined five dimensions of a quality Head Start classroom and program environment: a) classroom dynamics, b) classroom structural variables, c) classroom staff characteristics, d) program administration and support services, and e) parent involvement.

With regard to classroom dynamics, Howes, Phillips, and Whitebrook (1992) showed that

children in child care settings who are more secure in their relationships with their caregivers tended to also exhibit more social competence which expressed itself in the form of positive peer interactions in the classroom. This security was shown to be associated with teachers who exhibited more appropriate caregiving behaviors while the lower quality teachers tended to engender more avoidant and ambivalent responses from the children under their supervision. Low classroom quality has also been associated with more solitary and purposeless behavior in children (Vandell & Powers, 1983). The acquisition of social competence in young children does not, therefore, appear to be simply related to extended contact with peers, but rather to the positive classroom dynamics that generate from teachers who are able to create the appropriate context for positive peer interactions.

The child care literature has examined the relationships between classroom structure, adult-child ratio, group size, and classroom quality (Ruopp, Travers, Glantz, & Coelen, 1979; Whitebook et al., 1989; Kontos and Fiene, 1987), demonstrating that as group size increases, quality and teacher appropriate caregiving behaviors tend to decrease. Howes, Phillips, and Whitebook (1992) found a modest negative relationship between adult-child ratio and appropriate caregiving as well as a similar relationship between group size and developmentally appropriate activities. The Cost, Quality and Outcomes Study (Helburn, et al., 1995) reported that the number of children per adult and staff wages were the most important factors in predicting child care quality. When given a low child-teacher ratio and adequate classroom space as opposed to more crowded conditions, Holloway and Reichhart-Erickson (1988) found that children spent more time engaging in focused, solitary play. Further research is needed to

expand the evidential base for the connection between classroom structural characteristics and children's social functioning in the preschool setting, such as Head Start.

Turning to staff characteristics, various efforts have been made to connect the training and education level of teachers to the quality of the child care classroom environment, while relatively fewer studies have made the connection between teacher qualifications and training, and children's social functioning. Child-related training, but not formal education, was related to preschool classroom quality in the National Child Care Study (Ruopp, et al., 1979). The Cost, Quality and Outcomes Study (Helburn, et al., 1995) found that both the education level and early childhood training of teaching staff were positively associated with child care quality. In the National Child Care Staffing Study (Whitebook, et al., 1989), higher levels of formal education and early childhood training at the college level were associated with teachers who demonstrated more sensitive and appropriate caregiving behaviors in the classroom. Teacher education level was found to be the most important predictor of the teacher's communicative behavior with children in the classroom (Berk, 1985).

Teacher interactions with children has been recognized as a dimension of the quality of Head Start classrooms (Abbott-Shim, Lambert, & McCarty, 2000). Since the classroom environment is largely established and maintained by the teacher, the ability of programs to employ, train, retain, and monitor quality teachers is crucial to a program's success in delivering high quality services to children and families. The stability of the teaching staff, teacher salaries and benefits, and program efforts to hire and retain qualified teachers have been recognized as components of program quality in child care (Doherty, 1995; Helburn et al, 1995) and Head Start

settings (Granger & Marx, 1988; Granger, 1989; Chafel, 1992). The literature has also addressed the relationship between program administration and support services and children's social competence. The wages that a program pays have been linked to staff turnover, classroom quality, and children's social development (Whitebrook et al, 1989). Children who experience a series of caregivers and who lack a stable caregiving arrangement have been shown to be at risk for poor peer relationships and a poor ability to maintain interest in engaging in the social world (Rubenstein & Howes, 1979; Cummings, 1980). Toddlers and preschool children who transfer classes or schools tend to show increased negative affect, activity level, physical aggression, and sleep disturbance (Howes, 1987). Teacher turnover has been shown to be associated with children's social behaviors in child care settings. Specifically, at 24 months of age, children who changed primary teachers were more aggressive than children who remained with the same teacher, even when both the quality of the child care classroom setting and the teacher-child relationship had been taken into account. At 42 months of age, children who maintained secure teacher-child relationships had a higher frequency of complex play when they did not change teachers than when they did. High turnover rates in child care centers were also associated with more aggressive behaviors in four-year-old children (Howes & Hamilton, 1993).

In addition, children who form secure attachments to their caregivers tend to exhibit more prosocial behaviors when interacting with peers (Howes, 1987). In a study of four-year-old children in private child care settings, a teaching style characterized by respectful, engaging, responsive, and democratic interactions with children was associated with more child knowledge of social problem solving. However, child care quality indicators were not related to the quality

of social interactions between peers when the effects of social class were removed (Holloway & Reichhart-Erickson, 1988). Love (1993) found that when caregivers were attentive and encouraging in their interactions with children, the children exhibited fewer negative social behaviors such as fighti- g and crying and were more likely to be involved in classroom activities. Further research is needed to widen our understanding of the connections between the teacher education, training, beliefs, and teacher-child interactions, and child social outcomes in Head Start.

In regard to parent characteristics, the home environment contributes to the social behaviors that children manifest in the preschool classroom. For example, when young children are the victims of or witnesses to violence in the home, they tend to be at risk for behavioral and emotional difficulties (Osofsky, 1994; Grizenko & Pawliuk, 1994). Young children who are victims of or witness crime also appear to be at a somewhat higher risk than their peers who live in homes without violence for impaired social functioning including difficulties in forming relationships and trusting others (Rudo, Powell, & Dunlap, 1998). Clinical studies of young children who have been victims of violence report a wide range of symptoms including somatic complaints, phobias, and fine motor deficits (Cichetti & Lynch, 1993; Wildin, Williamson, & Wilson, 1991). When compared to children of similar socioeconomic status who had no history of maltreatment, physically abused four and five year olds tended to be more distractible, less persistent in tasks, less enthusiastic, and more noncompliant with teachers and parents (Egeland, Stroufe, & Erickson, 1983). Preschool-aged children living in shelters exhibited more behavioral problems, lower social competence, and lower perceived maternal acceptance than children from

nonviolent homes, children living in violent homes, or those living in homes with high levels of verbal conflict. Children living in violent homes were found to have more behavioral problems than all but the shelter children (Fantuzzo, Defaola, Lambert, Martinno, Anderson, & Sutton, 1991). The family system has been recognized as a mediating influence between family violence and child social impairments (Jaffe, Wolfe, & Wilson, 1990). When the family is more integrated into a social network, their preschool age children tend to exhibit more social competence with peers in child care settings (Espinosa & Howes, 1985).

Relatively few studies exist that have explored the relationship between classroom quality and children's social functioning in preschool settings such as Head Start which serve predominantly low-income children. When the relationship between the overall quality of Head Start classroom environments and child outcomes was examined in 32 classrooms, teachers' ratings of children's social behaviors were not related to the quality (Bryant, Lau, Burchinal, & Sparling, 1994). In a study of 257 four year old children within 29 Head Start classrooms, classroom quality, specifically the component that involves the balance in the daily schedule and the variety of classroom activities, was associated with child success at exhibiting positive social behaviors in Head Start and in other settings as observed by the parent. This same dimension of quality moderated the influence of maternal depression on child disruptive behaviors in the classroom (Lambert, Abbott-Shim, & McCarty, 1999). In a study of 80 Head Start classrooms and over 1,400 children, a comprehensive, locally developed, teacher administered developmental checklist was used as a measure of children's developmental progress. Social functioning items were contained on the checklist along with items pertaining to cognitive

language, and physical development. The teacher's ability to recognize individual differences in children and individualize instruction based on these differences was found to moderate the relationship between the child's age and the child's total score on the checklist. The Individualizing scale score from the Assessment Profile for Early Childhood Programs: Research Edition (Abbott-Shim & Sibley, 1992) (Assessment Profile) quality measure was negatively associated with age-post-assessment slope, indicating that age mattered less to a child's progress on the checklist in classrooms where the teacher was able to tailor classroom activities to the unique needs of children who are younger than their peers (Lambert, Abbott-Shim, & McCarty, 1998).

Additional research exploring the relationship between the various dimensions of Head Start classroom quality and children's social functioning is needed. This study sought to extend the child care literature regarding the social functioning of children in care settings of varying quality to the Head Start setting while assessing the quality of classrooms in a comprehensive and multi-faceted manner. The purpose of this study was to examine the relationship between multiple indicators of the quality of the Head Start classroom and the social functioning of children. The specific research questions were as follows: 1) What dimensions of Head Start classroom quality are associated with children's social functioning, and 2) Does classroom quality moderate the association between child and family background variables and children's social functioning?

Methods

Participants

The Level I subjects in this study consisted of 328 Head Start children who attended classrooms that were managed by the programs described above. The children were split almost evenly between boys and girls and came from almost exclusively low income homes with mothers who had attended an average of approximately 13 years of schooling. The father was present in 36% of the homes. Table ! contains the means and standard deviations for several family and child characteristics.

Insert Table 1 About Here

The Level II unit of analysis was the Head Start classroom. The forty classrooms that comprised the sample had an average child to adult ratio of 7.45 and an average class size of 16.70 children. The average age of both the teachers and aides was approximately 39 years. The average education level for the teachers was 14.13 years and 13.51 years for the aides. Table 2 contains a description of the characteristics of the classrooms.

Insert Table 2 About Here

Procedure

The Georgia State University Research Center on Head Start Quality has worked in partnership with three Head Start programs located in both rural and urban regions of the southeastern United States. The three programs included 67% African American children, 28% Caucasian, 4% Hispanic, and 1% other minorities. Head Start classrooms (n=190) were assessed during the 1997-98 academic year on a variety of quality indicators including class size, adult child ratio, the quality of classroom teaching practices and procedures, the education level of teaching staff, and teachers' beliefs about developmentally appropriate practices. The classrooms were classified as high or low quality based upon scores on the Assessment profile for early childhood programs: Research edition II (Assessment Profile) (Abbott-Shim & Sibley, 1998). A 95% confidence interval (CI) was placed around the mean quality composite score for the sample using the standard error of measurement from the test normative information. This had the effect of creating three groups of classrooms: 1) below the lower limit of the CI, or low quality, 2) within the CI, or average quality, and 3) above the CI, or high quality. We could then be confident at the 95% level that the true scores on the quality measure for classrooms in the high and low quality groups were different. Classrooms in the average group did not contribute to the random sample. Population density of the surrounding community was then determined by census information. A median split was used to determine those programs that served an area of high or low density. The partner programs cover a wide variety of urban and rural locations. A stratified random sampling plan was used to select 48 classrooms from a total of 190. We stratified on classroom quality as defined by the method described above and on the population

density of the county within which the Head Start center was located. This plan resulted in 12 high-quality and 12 low-quality urban classrooms along with 12 high-quality and 12 low-quality rural classrooms. From each of these classrooms we randomly selected 5 boys and 5 girls. Forty of the 48 (83.33%) classrooms included at least five children for whom we were able to collect all child outcomes, the complete teacher and classroom variables, and the parent interview. These 40 classrooms comprised the sample for analytic purposes. Only three classrooms had as few as five children in the sample and 75% of the classrooms contributed at least eight children to the sample. The resulting sample size of children was 328 from a total projected sample of 480 in the overall design .

Classroom observations using the Assessment Profile were conducted in the fall of 1997. Data collectors were trained and achieved 90% or greater agreement with an expert observer on the classroom quality measure before beginning data collection. Classroom observers also recorded the number of adults and children in the classroom at three different times during the observation. Training of data collectors on the parent measure was conducted in the late winter of 1998. Data collectors were trained and practiced administering the parent interview before beginning data collection. The parent interviews took place in a quiet space within the Head Start center. Collection of the parent and child measures occurred from March through May of 1998.

Measures

The Assessment Profile for Early Childhood Programs: Research Edition II (Abbott-Shim & Sibley, 1998) was used to observe the quality of classroom teaching practices. The instrument is an observational checklist with dichotomous items and includes five scales. Many factor

analytic studies and item response theory based scale development efforts support the scoring of the scales which are interval scaled ability estimates. The Learning Environment scale measures the provision and accessibility of classroom materials and space that support a variety of learning experiences and child independence. The Scheduling scale addresses both the balance and variety of learning contexts, opportunities, and activities reflected on the daily classroom schedule. The Curriculum scale encompasses both child-directed and teacher-directed learning strategies. The Interacting scale assesses teachers' initiation of positive interactions with children, teachers' responsiveness to children, and teachers' positive management of children's behavior. The Individualizing scale looks for evidence that teachers address children's individualized learning experiences through assessment, planning, referrals, communication with parents, and matching instruction to the child's developmental level. Validity was established through both content and criterion-related validity. Content validity was documented through a review of the instrument by a wide range of early childhood professionals and a cross reference of the items with the Accreditation Criteria of the National Association for the Education of Young Children (NAEYC, 1984). Concurrent validity was established by examining the relationship of the Assessment Profile to the ECERS (Harms & Clifford, 1980). A positive correlation between the total scores of the two measures was found by Wilkes (1989) ($r=.64$, $p<.001$) and Abbott-Shim (1991) ($r=.74$, $p=.000$). The reliability of the Assessment Profile is reported for the five scales, Learning Environment, Scheduling, Curriculum, Interacting, and Individualizing. The Kuder-Richardson 20 and Spearman-Brown corrected split-half reliability coefficients range from .79 to .98 and .81 to .98 respectively. The Item Response Theory based

reliability coefficients for the five scales range from .83 to .91. The Teacher Beliefs Scale (Burts, 1991) asks teachers to rate their beliefs in statements about a range of curricular goals and teaching strategies based on the original guidelines for developmentally appropriate early childhood practices by National Association for the Education of Young Children (Bredekamp, 1987).

The Adaptive Social Behavior Inventory (ASBI) (Hogan, Scott, & Bauer, 1992), a teacher rating scale, was used as a measure of the children's social functioning in the classroom. The instrument yields four scores, Express, Comply, Disrupt, and a composite score, Prosocial. It offers a balanced teacher assessment of the social dimensions of development. The reliability coefficients as reported by the authors are as follows: Express=.97, Comply=.93, and Disrupt=.91.

The Family and Children's Experiences Survey (FACES) Parent Interview (Administration on Children, Youth, and Families, 1997) was used as the principal data source for collecting family variables. The Parent Interview contains questions regarding household composition, demographic background variables, out-of-home care, services the child has received, satisfaction with Head Start services, parent involvement in the program, home learning activities, disabilities, the child's social behavior, the child's development, the transition to kindergarten, household routines, health and safety related issues, a broad range of home and neighborhood characteristics, and care giver depression, locus of control, and social support.

Analysis

Hierarchical linear modeling (HLM) was used to test for the association between

classroom quality indicators and the class mean scores on each outcome measure. The HLM 4 software (Bryk, Raudenbush, and Congdon, 1996) was used to perform all analyses. Level I models were built to test and adjust for the association of child and family background variables with each of the outcome measures of children's social functioning. Specifically, these models were used to adjust the within-classroom variance for child and family background variables. The extent to which within classroom variability in children's social functioning could be accounted for by these Level I predictors was tested. In doing so, insufficient variability between classrooms in the slopes of the Level I predictors was found to model these terms as random effects. A decision was made to model each Level I predictor as non-randomly varying. This finding could be interpreted to indicate that the various child and family background variables, in general, function similarly across groups of children. The finding also opened the possibility of testing for non-randomly varying between classroom effects. Once parsimonious Level I models were formed, in an effort to control for contextual variables, class mean versions of the Level I predictors were tested for their association with the class averages for each child outcome variable. Next, the classroom quality indicators were entered into the Level II models.

The following variables were available from the Family and Children Experiences Survey (FACES) Parent Interview (Administration on Children, Youth, and Families, 1997) and were each tested for inclusion in the Level I models as predictors of children's social behavior ratings: 1) father present in the home, 2) mother's education level, 3) household income, 4) gender of the child, 5) home violence, 6) maternal depression, 7) child age in months, and 8) whether the parent reports that the child had been identified as having a behavior disorder. The home

violence scale from the parent interview asks the parent to report the extent to which the child had been a witness to or a victim of violence in the home and immediate surroundings. The maternal depression scale is also a parent self-report measure and consists of the items from the short version of the Center for Epidemiological Studies Depression Scale (Radloff, 1977) which has been imbedded within the Parent Interview.

For each child social functioning outcome variable, Level II models were examined to test the association between indicators of classroom quality and both the classroom means and the slopes of Level I predictors. The following variables were tested for inclusion in the Level II models that were developed to predict the adjusted classroom mean for children's social behavior ratings: 1) adult-child ratio, 2) class size, 3) teacher beliefs about developmentally appropriate practices, 4) teacher reports about developmentally appropriate classroom activities, 5) teacher education level, 6) percent of the children in the classroom who are boys, 7) the percent of the children in the classroom who have been identified as having a behavior disorder, 8) class mean age, 9) class mean maternal depression and educational levels, and 10) the Learning Environment, Curriculum, Scheduling, Interacting, and Individualizing scale scores from the Assessment Profile. In addition, two variables were tested for inclusion in Level II models as predictors of the within classroom slope for each of the Level I predictors that remained in the models: Scheduling and Individualizing. These models then tested the extent to which these specific components of classroom quality serve to moderate the influence of family and child background variables on children's social functioning while seeking to replicate similar moderating influences from earlier studies (Lambert, Abbott-Shim, & McCarty, 1998; Lambert,

Abbott-Shim, & McCarty, 1999).

Results

The parent ratings of their child's social behavior were used to form two scale scores: Positive Social Behaviors and Problem Behaviors. As shown in Table 6, the overwhelming majority of the variance for both measures was found to be within classrooms: 99.9% for Positive Social Behaviors, and 94.1% for Problem Behaviors. Table 3 reports the results of the child level models for each of the parent-reported outcome variables. Maternal depression as measured by parent self-report on the FACES Parent Interview was associated with both Positive Social Behaviors and Problem Behaviors. Mothers who reported depression also tended to report that their children exhibit fewer positive social behaviors and more problem behaviors than do mothers with lower levels of depression. In addition, higher levels of reported maternal education were associated with lower levels of reported child problem behaviors. Boys were rated by parents as having more problem behaviors and fewer positive social behaviors than girls. The parents were asked whether their child had a behavior disorder. When the parent reported that the child had such a problem, the child also tended to be rated by the parent as having a high score on the Problem Behaviors scale. These family background variables reduced the within class variability in Positive Social Behaviors by 4.0% and by 20.8% for the Problem Behaviors scale.

Insert Table 3 About Here

The scale scores of the ASBI were used as the teacher rating of the child's social behavior in the classroom. The ASBI yields the following scale scores: Comply, Disrupt, Express, and Prosocial. As shown in Table 6, the majority of the variance in each of the teacher ratings of child social behavior was found to reside within classrooms. The proportion of the variance that was within classrooms ranged from 68.0% for the Comply measure to 75.6% for the Express measure. Several family and child background variables, as reported in Table 3, were shown to be associated with these teacher ratings. Children who are older than their peers tended to be rated by teachers as more expressive and as exhibiting more prosocial behaviors. Children with behavior disorders, as indicated by the parent's report, were rated by teachers as less compliant, less expressive, less prosocial, and more disruptive. Boys were rated by teachers as less compliant, less expressive, and as exhibiting fewer prosocial behaviors than girls. In addition, the home violence scale score from the FACES Parent Interview was associated with more teacher identified disruptive behavior. These family background variables reduced the within class variability from as little as 5.6% on the Disrupt scale to as much as 15.6% on the Prosocial measure.

Insert Table 4 About Here

When the Level II predictors were tested, as shown in Table 4, teachers who were more successful in developing a higher quality learning environment in their classrooms as measured by the Learning Environment scale score of the Assessment Profile tended to have lower class averages on the parent report of problem behaviors and accounted for 13.4% of the between classroom variance. In addition, teachers who gave their children higher average ratings on the Comply scale tended to score lower on the Interacting scale of the Assessment Profile, accounting for 22.2% of the between classroom variance. None of the other classroom or teacher level quality indicators were associated with the adjusted classroom means on the social functioning measures.

Insert Table 5 About Here

For the models that attempted to show an association between classroom quality and the relationship between family and child background variables and child social functioning, the moderating influence of classroom quality appeared in several ways as seen in Table 5. Age was less of a predictor of child prosocial behavior in classrooms with teachers who scored higher on the Individualizing scale of the Assessment Profile. Similarly, maternal depression was found to be less of a predictor of problem behaviors in classrooms with teachers who scored higher on the Individualizing scale.

Insert Table 6 About Here

Discussion

Most of the variability in child outcomes was found to be within classrooms. This finding is very consistent with the literature regarding classroom and school effects. It is interesting to note that even in a population with a restricted range of socioeconomic status, family background variables account for the majority of the variability in the children's social outcomes. The results of this study also confirm the findings of previous research with respect to the significance of exposure to violence (Osofsky, 1994; Grizenko & Pawliuk, 1994) and maternal depression as correlates of a child's social functioning.

Teachers who scored higher on the Learning Environment scale score tended to have children in their classrooms who were rated by their parents as, on average, less problematic outside of the Head Start environment. The Learning Environment scale of the Assessment Profile is similar in content to much of the ECERS, and this finding extends the relationships between quality and social functioning found in the child care literature (Bryant, Peisner-Feinberg, & Clifford, 1993) to the Head Start setting. While it is difficult to explain why this finding was not manifested in a similar pattern with respect to the teacher ratings of child social functioning in the Head Start classroom, it does lead to the possibility that these same children are better equipped to generalize the positive social behaviors that they are learning in the Head Start setting to the home environment. These children may be engaged in more self-directed

independent learning experiences than their peers who are in classrooms that do not have the variety and accessibility of learning materials, and therefore may be self-directed and less inclined to exhibit problem behaviors when they return home. The parents who interact with teachers who are more successful at creating and maintaining stimulating and interesting learning environments may also be better equipped to create positive and stimulating play spaces and activities for their children at home. There may be a type of modeling that takes place that helps create home environments that are more engaging for children and therefore lead to less problematic behaviors.

Teachers who scored lower on the Interacting scale of the Assessment Profile tended to give higher ratings to the children in their classrooms on the ASBI measure of compliant behaviors. Conversely, teachers who scored higher on the Interacting scale score tended to give lower ratings to the children in their classrooms on the ASBI measure of compliant behaviors. This finding, when interpreted in relation to the content of the items on the Interacting scale, may mean that teachers who place a high value on children's compliance and obedience in their classroom behavior may tend to initiate fewer positive interactions with children. They may also tend to be less responsive to children and less consistent in behavior management. This finding may indicate that the teacher style which incorporates interactions with children of the most stimulating and respectful nature may involve less emphasis on child compliance and obedience, and more tolerance for the highly interactive atmosphere which characterizes some higher quality classroom environments. Teachers who take advantage of the variety of teachable moments that occur in the context of everyday play and classroom activities may also have to recognize the

limitations of an over-emphasis on compliance. The teacher who is pursuing a very compliant classroom environment may also have a more difficult time creating a highly interactive classroom that lends itself to more developmentally appropriate interactions with children.

As mentioned above, age was somewhat less of a predictor of a child's prosocial behavior in classrooms with teachers who scored higher on the Individualizing scale. These teachers may be able to help children who are younger than their peers to learn prosocial behaviors through individualized attention. In addition, maternal depression was found to be a less powerful predictor of problem behaviors in classrooms with teachers who scored higher on the Individualizing scale. These teachers may be able to help children who are from homes with depressed mothers to learn prosocial behaviors through more individualized attention. These findings confirm the moderating influence of classroom quality on the relationship between child and family background variables and child functioning (Lambert, Abbott-Shim, & McCarty, 1998; Lambert, Abbott-Shim, & McCarty, 1999).

It is important to consider any interpretations of these findings in light of the limitations of this study. This study was observational in nature and used correlational information to attempt to identify patterns that may be suggestive of relationships worthy of further pursuit. The study used only one occasion for the measurement of the outcomes. The measurements were reported by the teacher and parent toward the end of the school year. The social behavior ratings may have been influenced by the overall impression that the teacher had formed of each child throughout the year and by social desirability on the part of the parent. The teacher ratings were also likely to be influenced by the whole range of classroom experiences that the teacher had

with each child across many different tasks and situations while the parent ratings were undoubtedly influenced by experience with the child across many settings. Future studies may want to use multiple measurements over time of both the quality of the classroom environment and the social behavior of the children. Observing both the initial status and growth in the child's social functioning in relation to the initial status and patterns of change in classroom quality may help expand our understanding of the influence that teachers can have on the development of children's social skills.

References

Abbott-Shim, M. (1991). Quality care: A global assessment. Unpublished Manuscript, Georgia State University.

Abbott-Shim, M. & Sibley, A. (1998). Assessment profile for early childhood programs: Research edition II. Atlanta, GA: Quality Assist, Inc.

Abbott-Shim, M., Lambert, R., & McCarty, F. (2000). Structural model of Head Start classroom quality. Early Childhood Research Quarterly, 15 (1), 115-134.

Administration for Children, Youth, and Families (1997). First Progress Report on the Head Start Program Performance Measures. Washington, DC: Government Printing Office.

Administration for Children, Youth, and Families (1997). Family and Child Experiences Survey. Washington, DC: Government Printing Office.

Berk, L. (1985). Relationships of educational attainment, child-oriented attitudes, job satisfaction, and career commitment to care giver behavior toward children. Child Care Quarterly, 14, 103-129.

Bryant, D.M., Peisner-Feinberg, E.S., & Clifford, R.M. (1993). Evaluation of public preschool programs in North Carolina: Final Report. Chapel Hill, NC: Frank Porter Graham Child Development Center.

Bredekamp, S. (Ed.). (1987). Developmentally appropriate practices in early childhood programs serving children from birth though age 8. Washington, DC: NAEYC

Bryant, D., Lau, L., Burchinal, M., & Sparling, J. (1994). Family and classroom

correlates of Head Start children's developmental outcomes. Early Childhood Research Quarterly, 9, 289-310.

Bryk, A., Raudenbush, S., & Congdon, R. (1996). HLM/4. [Computer software]. Chicago, IL: Scientific Software International.

Burts, D. (1991). Teacher beliefs scale. Baton Rouge, LA: Baton Rouge School of Human Ecology, Louisiana State University.

Chafel, J. (1992). Funding Head Start: What are the issues? American Journal of Orthopsychiatry, 62 (1), 9-21.

Cichetti, D. & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: consequences for children's development. Psychiatry, 56, 96-118.

Cummings, E. (1980). Caregiver stability and daycare. Developmental Psychology, 16, 31-37.

Doherty, G. (1995). Quality matters: excellence in early childhood programs. Reading, Mass.: Addison-Wesley Publishers.

Espinosa, M. & Howes, C. (1985). Social correlates of daycare toddlers' peer competency. Unpublished paper, University of California, Los Angeles.

Egeland, B., Stroufe, A., & Erickson, M.A. (1983). The developmental consequence of different patterns of maltreatment. Child Abuse and Neglect, 7, 459-469.

Fantuzzo, J.W., DePaola, L.M., Lambert, L., Martino, T., Anderson, G., Sutton, S. (1991). Effects of interpersonal violence on the psychological adjustment and competencies of

young children. Journal of Consulting and Clinical Psychology, 59 (2), 258-265.

Fields, M. V. (1999). Nipping Violence in the Bud, AERA Early Childhood Special Interest Group Newsletter.

Granger, R. (1989). The staffing crisis in early childhood education. Phi Delta Kappan, 71 (2), 130-134.

Granger, R. & Marx, E. (1988). Who is teaching? Early childhood teachers in New York City's publicly funded programs. New York: Bank Street College of Education.

Grizenko, N., & Pawliuk, N. (1994). Risk and protective factors for disruptive behaviors disorders in children. American Journal of Orthopsychiatry, 64, 534-544.

Hagekull, B. & Bohlin, G. (1995). Child care quality, family and child characteristics and socioemotional development. Early Childhood Research Quarterly, 10, 505-526.

Harms, T. & Clifford, R. (1980). Early childhood environment rating scale. New York: Teachers College Press.

Hartrup, W. W. & Moore, S. G. (1990). Early peer relations: developmental significance and prognostic implications. Early Childhood Research Quarterly, 5 (1), 1-18.

Helburn, S., Culkin, M., Morris, J., Mocan, N., Howes, C., Phillipsen, L., Bryant, D., Clifford, R., Cryer, D., Peisner-Feinberg, E., Burchinal, M., Kagan, S., & Rustici, J. (1995). Cost, quality, and child outcomes in child care centers. Executive Summary. Denver, CO: University of Colorado at Denver.

Hestenes, L., Kontos, S., and Bryan, Y. (1993). Children's emotional expression in child care centers varying in quality. Early Childhood Research Quarterly, 8, 295-307.

Hogan, A., Scott, K., & Bauer, C. (1992). The adaptive social behavior inventory (ASBI): a new assessment of social competence in high-risk three-year-olds. Journal of Psychoeducational Assessment, 10, 230-239.

Holloway, S. D. & Reichhart-Erickson, M. (1988). The relationship of child care quality to children's free-play behavior and social problem-solving skills. Early Childhood Research Quarterly, 3, 39-53.

Howes, C. (1987). Social competency with peers: contributions from child care. Early Childhood Research Quarterly, 2, 155-167.

Howes, C. & Hamilton, C. E. (1993). The changing experience of child care: changes in teachers and in teacher-child relationships and children's social competence with peers. Early Childhood Research Quarterly, 8, 15-32.

Howes, C. & Olenick, M. (1986). Child care and family influences on toddlers= compliance. Child Development, 57, 202-216.

Howes, C., Phillips, D., & Whitebook, M. (1992). Thresholds of quality: Implications for the social development of children in center-based child care. Child Development, 63, 449-460.

Jaffe, P.G., Wolfe, D.A., & Wilson, S.K. (1990). Children of battered women. Newbury Park, CA: Sage.

Kontos, S. & Fiene, R. (1987). Child care quality: Compliance with regulations and children's development: The Pennsylvania Study. In D. Phillips (Ed.), Quality in child care: What does research tell us? Washington, DC: National Association for the Education of Young

Children.

Lamb, M. E., Hwang, C., Broberg, A., & Bookstein, F. L. (1988). The effects of out-of-home care on the development of social competence in Sweden: A longitudinal study. Early Childhood Research Quarterly, 3, 379-402.

Lambert, R., Abbott-Shim, M., & McCarty, F. (1998). The influence of teacher individualizing practices on child developmental progress. NHSA Dialog: A Research-to-Practice Journal for the Early Intervention Field, 2 (1), 75-88.

Lambert, R., Abbott-Shim, M., & McCarty, F. (April, 1999). Social functioning of Head Start children in classrooms of varying quality. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Albuquerque, N.M., April, 1999.

Love, J. (1993). Does children's behavior reflect child care classroom quality? ERIC Document #356085.

Love, J., Meckstroth, A., & Sprachman, S. (1997). Measuring the quality of program environments in Head Start and other early childhood programs: A review and recommendations for future research. Washington, D.C.: National Center for Education Statistics (Report No. NCES-9736.

Miller, J. B. (1993). Learning from early relationship experience. In S. Duck (ed.), Learning About Relationships. Newbury Park, CA: Sage.

McCartney, K. (1984). The effect of quality of child care environment upon children's language development. Developmental Psychology, 20, 244-260.

National Association for the Education of Young Children (1984). Accreditation criteria

and procedures of the National Academy of Early Childhood Programs. Position Statement. Washington, D.C.: National Academy of Early Childhood Programs.

Osofsky, J. (1994). Introduction In J. Osofsky & E. Fenichel (Eds.), Caring for infants and toddlers in violent environments: Hurt, healing & hope. (pp. 3-6). Arlington, VA: Zero to Three, National Center for Clinical Infant Programs.

Phillips, D. & Howes, C. (1987). Indicators of quality in child care: Review of research. In D. Phillips (Ed.), Quality in child care: What does the research tell us? Washington, DC: National Association for the Education of Young Children.

Phillips, D., McCartney, K., & Scarr, S. (1987). Child care quality and children's social development. Developmental Psychology, 23, 537-543.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1 (15), 385-401.

Rubenstein, J. & Howes, C. (1979). Caregiving and infant behavior in day care and homes. Developmental Psychology, 15, 1-24.

Rudo, Z.H., Powell, D.S., & Dunlap, G. (1998). The effects of violence in the home on children's emotional, behavioral, and social functioning: A review of the literature. Journal of Emotional and Behavioral Disorder, 6 (2), 94-113.

Ruopp, R., Travers, J., Glantz, F., & Coelen, C. (1979). Children at the center: Final results of the national child care study. Cambridge, MA: Abt Associates.

Vandell, D. & Powers, C. (1983). Child care quality and children's free play activities. American Journal of Orthopsychiatry, 53, 489-500.

Whitebook, M., Howes, C., Phillips, D., & Pemberton, C. (1989). Who cares? Child care teachers and the quality of care in America. Final report of the National Child Care Staffing Study. Oakland, CA: Child Care Employee Project.

Wildin, S., Williamson, W., & Wilson, G. (1991). Children of battered women: developmental and learning profiles. Clinical Pediatrics, 30 (5), 299-304.

Wilkes, D. (1989). Administration, classroom program, sponsorship: Are these indices of quality care in day care centers. (Doctoral Dissertation, Georgia State University, 1989). Dissertation Abstracts International, 50, AAI8922912.

Table 1. Child and Family Characteristics.

Variable	Mean	SD
ASBI Comply	24.29	9.69
ASBI Expreśs	33.61	4.49
ASBI Disrupt	9.69	3.00
ASBI Prosocial	57.91	9.82
FACES Problem Behaviors	5.54	3.57
FACES Prosocial Behaviors	12.00	1.91
Home Violence	0.72	1.11
Maternal Depression	1.68	0.62
Mother's Education (years)	13.04	1.98
Household Monthly Income	1180.15	642.38
Mother's Age (years)	30.70	9.82
Child Age (months)	58.77	5.82
Father Present in Home		36.00%
Boy		50.60%
Behavior Disorder		4.60%

Note. n=328.

Table 2. Classroom and Teacher Characteristics.

Variable	Classroom Mean	SD
Children Per Adult	7.45	1.80
Number of Children	16.70	1.95
Number of Adults	2.40	0.81
Learning Environment	54.53	6.09
Scheduling	59.98	7.87
Curriculum	46.35	8.74
Interacting	51.08	7.16
Individualizing	53.57	9.47

	Teacher		Aide	
Variable	Mean	SD	Mean	SD
Years of Education	14.13	1.49	13.51	1.32
Years of Head Start Teaching	4.18	6.14	1.18	1.86
Years of Other Teaching	3.15	4.74	0.77	2.12
Total Years Teaching	7.33	7.47	1.94	2.85
Age	39.10	7.52	38.73	9.54
Appropriate Beliefs	4.08	0.40	4.02	0.42
Inappropriate Beliefs	1.39	0.33	1.65	0.42
Appropriate Activities	4.66	0.33	4.49	0.36
Inappropriate Activities	1.95	0.70	1.95	0.63

Note. n=40.

Table 3. Child Level Models.

Outcome Measure		Maternal Depression	Child Age	Maternal Education	Behavior Disorder	Boy	Home Violence
Teacher Ratings:							
Comply	β	------	------	------	-4.776	-2.180	------
	p	------	------	------	0.000	0.000	------
Express	β	------	0.109	------	-2.914	-1.454	------
	p	------	0.035	------	0.009	0.002	------
Prosocial Behavior	β	------	0.256	------	-7.868	-3.552	------
	p	------	0.006	------	0.000	0.000	------
Disrupt	β	------	------	------	2.264	------	0.327
	p	------	------	------	0.004	------	0.028
Parent Reports:							
Positive Social Behaviors	β	-0.431	------	------	------	-0.634	------
	p	0.024	------	------	------	0.004	------
Problem Behaviors	β	1.824	------	-0.204	2.898	1.162	------
	p	0.000	------	0.042	0.002	0.002	------

Note. n=328 children.

Table 4. Classroom Mean Models.

Outcome Measure		Grand Mean	Learning Environ.	Interacting
Teacher Ratings:				
Comply	γ	25.597	------	-0.177
	p	0.000	------	0.005
Express	γ	34.507	------	------
	p	0.000	------	------
Prosocial Behavior	γ	60.077	------	------
	p	0.000	------	------
Disrupt	γ	9.617	------	------
	p	0.000	------	------
Parent Reports:				
Positive Social Behaviors	γ	12.324	------	------
	p	0.000	------	------
Problem Behaviors	γ	4.843	-0.072	------
	p	0.000	0.047	------

Note. n=40 classrooms.

Table 5. Models Predicting Level 1 Slopes.

Outcome Measure		Slope	Individ.
Teacher Ratings:			
Comply	γ	------	------
	p	------	------
Express	γ	------	------
	p	------	------
Prosocial Behavior	γ	Age	-0.019
	p		0.048
Disrupt	γ	------	------
	p	------	------
Parent Reports:			
Positive Social Behaviors	γ	------	------
	p	------	------
Problem Behaviors	γ	Mat. Dep.	-0.111
	p		0.002

Note. n=40 classrooms.

Table 6. Additional Characteristics of Each Model.

Outcome	Proportion Variance Within Classes	Proportion Variance Between Classes	Within Classes Variance Reduction	Between Classes Variance Reduction	Class Mean Reliability
Teacher Ratings:					
Comply	0.711	0.289	0.132	0.222	0.729
Express	0.756	0.244	0.073	------	0.734
Prosocial Behavior	0.680	0.320	0.156	------	0.810
Disrupt	0.733	0.267	0.056	------	0.749
Parent Reports:					
Positive Social Behaviors	0.999	0.001	0.040	------	0.004
Problem Behaviors	0.941	0.059	0.208	0.134	0.356